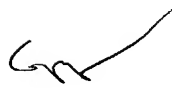


Examiner's 

AN 1999:317341 HCAPLUS
 DN 130:355225
 TI Iron alloy chisels for crushing refractories showing high resistance to settling, crack generation, and wear at high temperature
 IN Nakamura, Yukihiro; Suzuki, Toshifumi; Shibata, Keiji; Kanahara, Shigeru; Maijima, Satoru
 PA Nippon Steel Corp., Japan; Daido Steel Co., Ltd.
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11131193	A2	19990518	JP 1997-314541	19971031
PRAI	JP 1997-314541		19971031		

AB The chisels are made of Fe alloys containing C 0.20-0.60, Si <0.80, Mn 0.1-2.0, P ≤0.020, S ≤0.030, Cr 2.0-9.0, Mo 0.10-6.0, W 0.10-6.0, and V 0.01-2.5 weight%. The Fe alloys may further contain (A) Nb 0.01-1.5, Ta 0.01-1.5, Zr 0.01-1.5, Hf 0.01-1.5, Ti 0.01-1.5, Sc 0.001-1.5, and/or Y 0.001-1.5, and/or (B) Co 1.0-10.0, Ni 0.01-2.0, Cu 0.25-1.0, B 0.001-0.050, and/or REM 0.001-0.60 weight%.

0.2-0.6 C
 ≤0.8 Si
 0.1-2 Mn
 ≤0.02 P
 ≤0.03 S
 2-9 Cr
 0.1-6 Mo
 0.1-6 W
 0.01-2.5 V
 Al
 O
 N

 Fe

0.01-1.5 Nb
 1-10 % Co
 0.01-2 Ni
 0.25-1 Cu
 0.001-0.05 B